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SECOND SERIES,
No. 42.

BULLETIN
OF THE
LOUISIANA STATE EXPERIMENT STATIONS,

WM. C. STUBBS, Ph. D., Director.

HORTICULTURE.
RESULTS OF THE YEAR 1895.

ISSUED BY THE BUREAU OF AGRICULTURE. A. V. CARTER, COMMISSIONER.

LOUISIANA STATE UNIVERSITY AND A. & M. COLLEGE.

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OFFICE OF STATE EXPERIMENT STATION, }
LOUISIANA STATE UNIVERSITY AND A. AND M. COLLEGE, }
Baton Rouge, April, 1896. }

Hon. A. V. Carter, Commissioner of Agriculture, Baton Rouge, La.:

DEAR SIR—I hand you herewith manuscript of results of experiments in horticulture made at Audubon Park under my supervision, at Baton Rouge under Prof. F. H. Burnette, Horticulturist, and at Calhoun under Mr. Eugene Watson, Horticulturist of that station. These results are supplemented with a description of the soils of this State specially adapted to truck gardening. I request that this be published as Bulletin No. 42.

Respectfully submitted,

WILLIAM C. STUBBS,

Director.

TRUCK GROWING IN LOUISIANA.

The peculiar location of this State, occupying the extreme southern end of the great Mississippi valley, with its 30 millions of people, its excellent transportation facilities, including the great Mississippi river and its tributaries, which must forever serve in a measure, as a check upon excessive charges, for freight of the several lines of railway which parallel it, its favorable climate and its excellent soils, all point to "truck growing" as a most profitable industry for the intelligent agriculturists of this State to engage in. The large cities of Chicago, Cincinnati, Indianapolis, St. Louis, Kansas City and others should be mainly supplied with early vegetables from this State. Railroads have always shown a disposition to give rapid and cheap transportation to farmers, whenever the supply of trucks would justify the expenditure needed for the equipment of cars suitable for the undertaking. To make this supply requires the active co-operation of many farmers in each locality and unfortunately the conservatism of the latter is so great as to preclude such action, until forced by necessity or demonstrated by many successful individual efforts that such a co-operation is safe and profitable. Successful individual effort is of rare occurrence. In shipping a few boxes or barrels of vegetables, they must go by express in order to reach a distant market in good order and the charges are so excessive as to preclude profit. A single car load sent by freight does not receive the despatch nor attention which is necessary to insure the arrival in good order of its contents. Hence little or no profit is usually the result of such shipment. There must be a sufficient number of shippers to load a full train of well ventilated and refrigerator cars, which can be despatched as through freight behind the through passenger trains, at regular intervals, to insure handsome profits to

the grower and reasonable rates of freight to the railroad. Unfortunately many sections of the State are waiting on the railroads for such transportation and the railroads, on the other hand, are delaying the preparation of such equipments and the adoption of such a schedule, until the trucks are offered. Hence little or nothing is being done along the lines of some of our main railroads, which run through sections of the State, which are pre eminently adapted by nature, to the growing of fruit and vegetables. Fortunately, some of our railroads have awakened to the necessity of building up the country through which they pass and have given facilities for cheap and rapid transportation, even at heavy losses at first to beginners in this industry, realizing that if a few farmers could successfully inaugurate this new departure in agriculture, thousands would quickly follow and ultimately enable them to recoup losses, build up the adjacent country and increase the business of the road.

The Illinois Central Railroad some years ago adopted this wise policy and is to-day flattered by the wonderful results obtained. During the early spring a rapid vegetable train leaves New Orleans daily and picks up all along its lines cars freshly loaded and awaiting its arrival. These trains follow closely the through passenger trains to Chicago and arrive in the latter city with little or no injury to the vegetables. Hence profitable returns to the farmers along its lines for cabbages, beans, radishes, lettuce, cucumbers, beets, strawberries, etc.

A visit to the country along this road from Lake Maurepas to the State line, will convince anyone of the wisdom of the railroad in adopting such a policy. A few years ago, scarcely any depot along this line in this State paid the expenses of a local agent. To day one finds the thriving towns of Pontchatoula, Hammond, Tickfaw, Roseland, Amite, etc , all busily engaged in truck and fruit growing and furnishing the road a large income from the transportation of their products. Small farms well tilled are affording good incomes to thousands of Northern and Western farmers, who have come South for health, recreation, comfort and money. The Mississippi Valley Railroad is also proffering similar inducements to the dwellers along its

line, but as yet has met with but little encouragement in this State, the farmers and planters adhering to the old practice of growing sugar cane and cotton.

The Missouri Pacific, which enters the State in Morehouse Parish and penetrates it as far south as Alexandria, has succeeded by its liberal inducements in persuading many of the denizens along its line into the truck industry. So great has been its success, that recently an Horticultural Society was organized in the city of Monroe for the avowed purpose of growing trucks for shipment to the West. This society has a numerous membership pledged to the growing of a large acreage in vegetables the present year. Sooner or later "truck growing" will be a large industry along this road under the liberal policy now being practiced.

With the establishment of permanent "truck growing" there will follow in every neighborhood a canning factory, which will utilize the surplus which distant markets refuse. Such factories will insure the grower a home market at some price, when remunerative returns are no longer obtained by shipment. Thus one industry creates another and by multiplying them in every favorable locality, a large aggregate wealth is created.

The good work accomplished by the Illinois Central and Missouri Pacific should provoke the other roads of our State to similar action and the very successful results obtained by the former should convince them of the wisdom of such a move. The farmers generally are ready for the trial of any new industry which will bring exemption from the dominion of cotton, but must first have deep conviction of the sincerity of the railroads in proffering full co-operation.

SECTIONS OF THE STATE ADAPTED TO TRUCK FARMING.

Sandy loams, carrying a normal content of from 6 per cent. to 12 per cent. of moisture are peculiarly adapted to certain kinds of trucks, viz: Irish and sweet potatoes, radishes, beans, peas, tomatoes, melons, beets and strawberries. While heavier soils with a larger moisture capacity are better adapted to cabbages, onions, egg plants, etc.

In and around New Orleans are grown an immense amount of "trucks;" all kinds for the local market, and cabbages, onions, egg plants, etc., for shipment. There are over twenty-five hundred gardeners engaged in this industry. Around the cities of Baton Rouge and Shreveport there are also local gardeners who supply these cities and occasionally make small shipments abroad.

Louisiana has a large area of soils of the sandy loam type specially adapted to truck and fruit growing and it is very widely extended, bordering nearly every railroad in the State.

The Illinois Central nearly besects the pine hills of the Florida Parishes and extends for over fifty miles across them. Experience has proven the adaptability of these soils to this industry and thousands of acres are to-day occupied by strawberries, radishes, lettuce, beets, Irish potatoes, cabbages, etc.

The Mississippi Valley has a small industry in and around Wilson of most excellent truck soils and is doing much towards developing them. Beyond the Louisiana line, near Centreville, Gloster and other points, in Mississippi, similar soils prevail and larger developments of the truck industry have been secured.

The Missouri Pacific is gradually developing the fitness of the soils along its line and will some day have village truck farms along its entire length. The two sections of the State, however, which are perhaps better adapted to general truck growing, have had the least development.

Experiments at the North Louisiana Experiment Station, Calhoun, La., on the line of the Vicksburg, Shreveport and Pacific Railroad, have shown that vegetables of nearly every kind and of perfect quality could be easily and cheaply grown. The soil on this Station is typical of the larger portion of North Louisiana, through which the Vicksburg, Shreveport and Pacific runs, in an East and West, and the Texas and Pacific in a North and South direction. No finer market gardens could anywhere be established than along these two roads and a liberal and persuasive policy on the part of the managers of these roads, would soon demonstrate the truth of this assertion, give an increased

business to the roads, develop population and enhance the values of adjacent lands. It is hoped that such a policy may soon be inaugurated.

The country bordering the Southern Pacific from the Mermentau river to the Texas line is well adapted from the character of soil to truck growing. Drainage, which can easily be accomplished, will be needed in many places for the best results. A similar country borders the Watkins and Gulf Railroad, extending from Lake Charles to Alexandria. The very liberal policy which both of these roads have pursued in securing the many new settlers along these lines will most probably be continued in co-operation with these settlers in developing every profitable new industry. It is therefore reasonable to expect an early development of the fruit and truck industries along these lines. It will thus be seen that Louisiana has the climate, the soil, the transportation facilities and intelligent farmers, the needed factors for success in truck and fruit growing. It only requires the harmonious co-operation of the last two to bring to full fruition the grand possibilities of the industry.

SUGGESTIONS TO THOSE CONTEMPLATING EMBARKING IN THIS INDUSTRY.

While the soils mentioned above are physically adapted to the growing of trucks, they must be made very fertile for profitable results. Truck farming means intensive, high farming. Lands dedicated to trucks must be heavily fertilized, not with commercial fertilizers only, but with such home made manures as will insure large supplies of organic matter. The frequent incorporation of vegetable matter by the growing and turning under of some leguminous crop—preferably cow peas—additioned by mineral manures, will in a few years render these soils well adapted to truck growing.

If stable manures be used, they should first be thoroughly composted and several times piled and cut down, in order to bring it into a most available condition as plant food. A compost of stable manure, cotton seed, acid phosphate and kainite, mixed in such proportions as will suit the crop to be grown, will

be found a very effective fertilizer, perhaps superior to any other mixture.

When the supply of home manures is inadequate for the demands of your crop, these may be supplemented by cotton seed meal, acid phosphate and kainite, mixed to suit the kind of vegetable grown.

PROPER ROTATION

must be observed in truck growing as in general farming, if the fertility of the soil be maintained and maximum results desired. A slight knowledge of botany, yea even of the character of the vegetables grown, will greatly assist the farmer in determining the rotation to be adopted. Melons, cucumbers and squashes belong to one family and should not succeed each other. Egg plants, tomatoes and Irish potatoes form another, and beans and peas another.

Always follow a crop by another of a different family. Expressed in a simpler manner, roots should not follow roots. A top rooted plant will follow well a fibrous rooted one. After a heavy manuring, cabbages, onions, Irish potatoes and egg plants should be planted, since these require excessive fertility for best results. Follow these crops with tomatoes, squashes, etc., and these in turn by beans, peas, etc. A farmer will soon have a suitable rotation of both crops and fertilizers.

COLD FRAMES AND HOT BEDS

may be frequently used with advantage for the growing of early vegetables. Even the use of glass sash may sometimes be made to pay handsomely.

The use of cheap cheese cloth is frequently found efficacious in protecting tomatoes, egg plants, etc., against frosts and several transplanting under such a cover before setting in the field has been extensively practiced with excellent results.

SEED.

It is highly important to use first-class seed and these should be either grown and saved with care by the farmer, or else obtained from a reliable dealer. Formerly it was deemed necessary to procure most of our seed from the North, under the as-

sumption that they were earlier and better adapted to our wants. But this is rather an opinion, not a fact, and great doubt exists in the minds of many experienced horticulturists as to the propriety of buying any of our garden seed from the North. Some seed, *e. g.*, peas and beans, grown in northern latitudes are probably better suited to our wants than if grown at home, while Irish potatoes (from the late fall crop), egg plants, butter beans, okra, cucumbers, melons, etc., are certainly better from home grown seed.

In order to test this question, last year seeds of the same variety of nearly every kind of vegetable were obtained in triplicate from R. Frotcher of New Orleans and Jas. M. Thorburn & Co. of New York, and planted carefully at each of the three stations. Of course it was impossible to say exactly where each variety sold by either of these seedsmen came from, but in the main, one sold Southern grown seed, the other Northern. The results are given in the general summary presented below.

ASPARAGUS

when properly grown is a very profitable crop. It requires two or three years to develop a profitable asparagus plantation, but when well developed will last fifteen to twenty years. The time and expense involved in starting such a plantation, deters many a farmer and gardener from the attempt. Hence this delicious salad plant is not extensively grown in this State.

AT BATON ROUGE

four varieties were grown with fully good results. The following is the list in the order of their earliness as well as productiveness: Palmetto, Barr's Mammoth, Conover's Colossal and Moore's Crossbred.

BEANS (SNAP)

grow best on lightest and dryest soils. The following were grown at the three stations. The yield is given on a scale of 0—10. The dates refer to month and day:

BEANS (SNAP).

NAME.	Audubon P'k		Baton Rouge		Calhoun.			Where from
	First Picking	Y'ld 0-10	First Picking	Y'ld 0-10	First Picki'g	Last Picki'g	Y'ld 0-10	
Early Mohawks	April 24	7.	May 28	5.5	May 30	Jun. 20	7.	Thorburn.
Early Mohawks	April 24	7.	May 28	5.5	May 30	Jun. 20	7.	Frotscher.
Extra Early Refugee.	April 24	8.	May 29	6.	May 27	Jun. 30	9.	Thorburn.
Extra Early Refugee.	April 24	8.	May 28	9.	May 27	Jun. 20	9.	Frotscher.
Ex. Early Valentine..	April 28	8.	June 4	7.1	May 27	Jun. 15	6.	Thorburn.
Ex. Early Valentine..	April 28	8.5	June 4	6.8	May 30	Jun. 24	10.	Frotscher.
Warddell's Kidney ..	April 24	6.	May 28	5.	May 27	Jun. 20	5.	Thorburn.
Warddell's Kidney ..	April 24	5.5	May 28	6.	.....	.....	.....	Frotscher.
Valentine Wax	April 24	5.	June 1	5.	.....	.....	.....	Thorburn.
Valentine Wax	April 24	5.2	.....	.....	May 27	Jun. 20	5.	Frotscher.
Prolific Market	April 24	9.	June 5	3.4	May 5	Jun. 25	6.	Thorburn.
Rustless Yellow Wax.	.....	3.	June 13	1.3	Jun. 1	Jun. 24	8.	Buckbee.
Golden Eye Wax .....	.....	4.	June 15	3.	.....	.....	.....	Buckbee.
Dwarf German Wax..	April 30	6.	June 1	4.	May 27	Jun. 15	7.	Frotscher.
Saddle Bock Wax	April 30	3.	June 1	4.2	May 37	Jun. 15	4.	Burpee.
Stringle's Green Pod..	April 30	4.	June 5	3.5	Jun. 1	Jun. 15	4.	Burpee.
Kerney's Rustless....	May 8	9.	.....	.....	Jun. 15	Jun. 15	4.	Frotscher.

The following varieties are to be generally recommended :
Early Mohawk, Extra Early Refugee, Extra Early Valentine,
for early crop. There is but little choice for the later varieties.

LIMA BEANS.

NAME.	Audubon P'k		Baton Rouge		Calhoun.			Where from
	First Picking	Y'ld 0-10	First Picking	Y'ld 0-10	First Picki'g	Last Picki'g	Y'ld 0-10	
Burpee's Bush	June 16	6.	July 1	10.	Jun. 30	Aug. 1	6.	Thorburn.
Burpee's Bush	June 16	6.	July 1	9.8	Jun. 30	Aug. 1	6.	Frotscher.
Henderson Bush	June 6	10.	July 2	9.9	Jun. 27	Aug. 1	10.	Thorburn.
Henderson Bush	June 6	10.	July 2	9.8	Jun. 27	Aug. 1	10.	Frotscher.
Large Lima	June 20	5.	July 10	9.4	.....	.....	8.	Thorburn.
Large Lima	June 20	6.	July 10	10.	.....	.....	8.	Frotscher.
Willow Leaf	June 30	6.	June 15	10.	.....	.....	7.	Frotscher.
Carolina Sewee	June 30	8.	.....	.....	.....	.....	8.	Frotscher.

POLE SNAP BEANS.

NAME.	Audubon P'k		Baton Rouge		Calhoun.			Where from
	First Picking	Y'ld 0-10	First Picking	Y'ld 0-10	First Picki'g	Last Picki'g	Y'ld 0-10	
Southern Prolific	May 20	9.	.....	0.	.....	.....	10.	Thorburn.
Southern Prolific	May 20	9.	June 11	5.	.....	.....	10.	Frotscher.
Golden Cluster Wax.	May 10	8.	June 5	5.	.....	.....	9.	Thorburn.
Golden Cluster Wax.	May 10	8.	June 3	10.	.....	.....	9.	Frotscher.
Black Wax	May 25	6.	May 30	9.5	.....	.....	6.	Thorburn.
New Holstein	June 6	3.	June 13	2.	.....	.....	7.	Buckbee.

From above it would appear that there is little or no difference in the seed of same variety obtained from the different

seedsmen. The seed from Buckbee were received and planted later than the rest.

For shipment or family use the Henderson Bush is a most desirable variety, excelling all others of the Lima strain. The large Lima Bean has never been as prolific as the smaller variety, either as a pole or bush.

BEETS.

VARIETY.	Yield on Scale 0-10.			
	Audubon Park.	Baton Rouge.	Calhoun.	Seedsman.
Bassano.....	9.5	8 10		Frotscher.
Bassano.....	9.5	9 8.75		Thorburn.
Bastian's Blood Turnip.....	9	8 4.50		Frotscher.
Bastian's Blood Turnip.....	9	7 7.25		Thorburn.
Early Blood Turnip.....	8	10 9.50		Frotscher.
Early Blood Turnip.....	8	10 1.		Thorburn.
Eclipse.....	10	7 7.5		Frotscher.
Eclipse.....	10	7 7.75		Thorburn.
Egyptian Red Turnip.....	8	7		Frotscher.
Egyptian Red Turnip.....	8	7 6.50		Thorburn.
Lentz.....	9	8 6.25		Frotscher.
Lentz.....	9	8 9.25		Thorburn.
Early Red F at Turin.....	9	7 8		Thorburn.
Black Queen.....	6	5 6.25		Thorburn.
Leonette Blood.....	7	5 8.50		Frotscher.
Stinsen Early Blood.....	9.5	7 7.00		Frotscher.
Danish Improved Sugar.....	6	5		Buckbee.
Dark Stinson.....	8	8 7		Buckbee.
Long Red Mangel Wurtzel.....	10	7		F & T & H
Buckbee's Sunset .....	....	6	6	Henderson

The above were planted at Audubon Park March 4th, Baton Rouge February 27th, and Calhoun March 5th. Excellent stands were obtained at Audubon Park and Baton Rouge, while at Calhoun some varieties gave very defective stands.

The Eclipse surpassed all others at Audubon Park, the Early Blood Turnip at Baton Rouge and the Bassano at Calhoun. These and several others are all excellent varieties, and individual taste must make a selection.

CABBAGES.

VARIETY.	Audubon Park.		Baton Rouge.		Calhoun		Name of Seedsman.
	When matured.	Yield on scale 0-10.	When matured.	Yield on scale 0-10.	When matured.	Yield on scale 0-10.	
Early Jersey Wakefield.....	May 20	9	June 16	8	June 5	9	Frotscher.
Early Jersey Wakefield.....	" "	"	" 15	7	" "	5	Thorburn.
Early York.....	" 10	5	" 10	10	" 7	6	Frotscher.
Early York.....	" 5	6	" 12	10	" 7	6	Thorburn.
Early Dwarf Savoy.....	" 25	5	" 20	7	" 16	8	Frotscher.
Early Dwarf Savoy.....	" "	5	" 20	7	" 16	6	Thorburn.
Early Flat Dutch.....	" 20	10	" 20	9	" 10	10	Frotscher.
Early Flat Dutch.....	" "	10	" 18	10	" 10	10	Thorburn.
Stein's Early Flat Dutch....	" 25	10	" 15	10	" 13	10	Frotscher.
Stein's Early Flat Dutch....	" "	10	" 15	9	" 13	7.5	Thorburn.
Drumhead Savoy.....	June 1	9	" 29	8	.....	.....	Frotscher.
Drumhead Savoy.....	" "	8	" 30	8	June 24	5	Thorburn.
Drumhead Savoy.....	.....	.....	May 30	8	.....	.....	Brill.
Solid South.....	June 10	10	June 27	9	June 12	6	Frotscher.
Succession.....	" 5	8	" 30	7	" 12	8	"
Superior Flat Dutch.....	" 10	8	" 30	8	" 21	7.5	"
Superior Flat Dutch.....	.....	.....	May 30	8	.....	.....	Brill.
Large Late Flat Dutch.....	June 10	10	June 25	9	June 21	4	Thorburn.
All Seasons.....	" 10	8	" 27	7	" 12	7	"
All Seasons.....	.....	.....	May 27	10	.....	.....	Brill.
Fottler's Imp'd Brunswick	May 20	6	June 25	8	June 21	6	Thorburn.
Market Gardeners L.F.D'tch	.....	.....	" 30	8	" 12	5.5	"
Early Etampes.....	May 15	6	" 12	6	" 10	6	"
Vandergaw's Quick Growing	" 15	6	.....	.....	" 10	6	"
Red Dutch.....	" 25	5	June 20	5	.....	.....	{ Frotscher & Thorburn.
Felder Kraut.....	.....	.....	.....	.....	June 12	9.5	Thorburn.
Hollander.....	.....	.....	June 30	5	.....	.....	Buckbee.
New Xmas King.....	.....	.....	" 30	5	.....	.....	"
New Queen.....	.....	.....	" 25	9	.....	.....	"
Great Dane.....	.....	.....	" 30	5	.....	.....	"
Long Island Second Best....	.....	.....	May 25	10	.....	.....	Brill.
Newark Early Flat Dutch...	.....	.....	" 27	5	.....	.....	"
Warren Stone Mason.....	.....	.....	" 27	8	.....	.....	"
Late Drumhead.....	.....	.....	" 28	8	.....	.....	"
Louisville Extra Drumhead..	.....	.....	June 7	5	.....	.....	"

The seed in above experiments were planted on May 4th at Audubon Park and Calhoun. At Baton Rouge the seed from Frotscher and Thorburn sown February 25th, those from Brill January 7th, and Buckbee's March 1st. At Audubon Park the best are Early Jersey Wakefield, Early Flat Dutch, Stein's Early Flat Dutch, Solid South and Late Flat Dutch. At Baton Rouge the Early Etampes, Early York, Stein's Flat Dutch, Late Flat Dutch and Solid South. At Calhoun Early Jersey Wakefield, Early Flat Dutch, Stein's Flat Dutch, Succession and All Seasons.

At Baton Rouge, besides the above, sowings were made in January and September. The dry weather, however, retarded the winter crop and gave fine heads for January and February instead of December. For market, particularly in the Southern part of the State, the most profitable crop is grown and harvested in the winter and early spring, though with care and attention good crops could easily be grown in the spring and summer.

CAULIFLOWERS

were grown only at Baton Rouge. To grow this vegetable successfully it should be planted early in August and harvested during the winter. With proper care, an excellent crop of this valuable plant can be grown. The following are the results at Baton Rouge.

In all ten varieties of cauliflowers were grown, two of which were the same from Frotscher and Thorburn. The Early Snowball and Half Early Paris gave the best heads. The following table was obtained from the sowing made August 10. The prolonged droughts delayed the maturity of the heads many days:

CARROTS

were grown at Audubon Park and Baton Rouge. Four varieties were obtained from both Frotscher and Thorburn, viz: Chantenay, Large Orange, Danver's Intermediate and Scarlet Horn. Danver's Intermediate was also sent by Buckbee, and New Forcing by Burpee. Sowings were made at Audubon Park, March 4th, and at Baton Rouge, March 1st. All varieties grew well and gave good marketable crops. The Chantenay proved the best, followed closely by New Forcing.

SUGAR CORNS—YIELDS AND VARIETIES.

VARIETY.	Audubon Park.				Baton Rouge.		Calhoun.		Seedsman.
	Yield per acre.		Per cent. grain to ears.	Value for table 0—10.	When mature	Yield 0—10	When mature	Yield 0—10.	
	Total.	Ears with shuck.							
Manhattan.....	420	.....	.....	1	.....	.....	.....	.....	Thorburn.
Extra Early Cory.....	3360	1344	58.33	6	June 20	5	June 1	5	"
White Cory.....	1680	504	50.00	5	.....	.....	.....	.....	"
Early Marblehead.....	3360	840	50.00	5	.....	.....	.....	.....	"
Early Minnesota.....	5040	1680	70.00	6	.....	.....	.....	.....	"
Perry's Hybrid.....	7560	3360	50.00	7	.....	.....	.....	.....	"
Melrose.....	6720	2520	57.14	7	.....	.....	.....	.....	"
Extra Early Dwarf.....	8400	3360	50.00	8	June 1	7	June 5	8	Frotscher.
Early Dwarf Sugar.....	6720	2520	50.00	6.5	" 13	6	" 5	6	"
Extra Early Adams.....	2520	840	66.66	6	" 5	5	" 1	2	Thorburn.
Early Adams.....	2520	420	60.00	6	May 22	5	" 1	2	"
Early Adams.....	11760	3360	55.00	9	June 1	10	" 12	2	Frotscher.
Early Fordhook.....	5880	2520	57.01	6	" 13	6	" 5	4	Burpee.
Crosby's Early.....	6720	2520	50.00	8	" 15	6	" 5	7	Thorburn.
Pee and Kay.....	5880	2100	46.66	8.5	.....	.....	.....	.....	"
Potter's Excelsior.....	13440	5040	50.00	9	.....	.....	.....	.....	"
Concord.....	12600	4200	50.00	8.5	.....	.....	.....	.....	"
Amber Cream.....	10080	3780	50.00	7	.....	.....	.....	.....	"
Excelsior Sweet.....	10080	3699	57.68	7.5	.....	.....	.....	.....	"
Early Eight Rowed.....	15120	5880	50.00	9	.....	.....	.....	.....	"
Asylum.....	13440	4872	52.94	9.5	.....	.....	.....	.....	"
Triumph.....	14280	4872	64.54	9	.....	.....	.....	.....	"
Hickox.....	11760	3360	55.55	9	.....	.....	.....	.....	"
Roselyn.....	13440	3699	59.00	9	.....	.....	.....	.....	"
Stowell's Evergreen.....	16800	3360	56.00	9.5	July 22	5	June 17	4	"
Stowell's Evergreen.....	17640	4872	50.00	9	" 20	5	" 17	3	Frotscher.
Early Mammoth.....	15120	5880	50.00	9	.....	.....	.....	.....	Thorburn.
Black Mexican.....	12096	4872	50.00	8.5	.....	.....	.....	.....	"
Ne Plus Ultra.....	10248	2520	50.00	7	.....	.....	.....	.....	"
Late Mammoth.....	14280	3360	50.00	8.5	.....	.....	.....	.....	"
Egyptian.....	14280	3699	54.05	8	.....	.....	.....	.....	"
Country Gentleman.....	13440	3360	50.00	8	June 15	9	June 20	10	"
Best of All.....	.....	.....	.....	.....	July 27	6	" 5	9	Buckbee.

The above are classed about in the order of maturity, the earliest being ready for table at Audubon Park May 8th, and

continuing on until June 22d, all varieties being planted March 2d. Plantings were made at Baton Rouge March 26 and at Calhoun March 22d.

The following are recommended for family use: Early Adams, Extra Early Dwarf, Crosby's Early, Asylum, Country Gentleman, and Best of All.

At Audubon Park an attempt was made to test the efficacy of adopting some variety of sugar corn as a food for hogs which may precede in earliness a crop of Early Amber sorghum and which may be gathered by the hogs when in roasting ear. At this stage, it is said that the hogs will eat the entire corn plant. To determine the amount of green food available for such purposes in each variety, the entire stalks were cut down and weighed, the ears with shucks were removed from the stalks and weighed, and then the ears were shucked and grain removed from the cob and weighed. Column first gives the total weight of green matter per acre. Column second the total weight of ears with shuck per acre and column third the percentage of grain from these ears.

An examination of the tables will show that many varieties gave over seven tons of green matter per acre, with Stowell's Evergreen reaching over eight tons. This variety, therefore, seems best adapted for purposes of hog feed. It was planted March 2d and harvested June 4th.

At Audubon Park it was impossible to test whether sugar corn would be relished and cleanly harvested by hogs, having none at this station. But, if it should be found palatable on trial, it would appear from above experiments, that some of the varieties would furnish a large, valuable, and early food crop for hogs.

By following this crop successively with crops of Early Amber Sorghum, Spanish Peanuts, Field Corn, Peas and Sweet Potatoes, permitting the hogs to gather them all, it is believed that pork can be grown in the extreme South cheaper than anywhere else.

CUCUMBERS.

This vegetable is largely grown around New Orleans, both under glass in winter and in open field for Western markets. Last year was a most favorable season and all varieties did well. There was little or no blight and whenever it appeared, it was easily checked by Bordeaux Mixture.

At Audubon Park seed were planted March 4th, at Baton Rouge March 23d, and at Calhoun April 10th. The following are the results :

VARIETY	Audubon P'k		Baton Rouge		Calhoun			Seedsman
	Y'ld 0-10	First Pickling	Y'ld 0-10	First Pickling	Y'ld 0-10	First Picki'g	Last Picki'g	
Early Green Cluster.	9.	May 6	8.	May 20	5.	Jun. 10	July 10	Thorburn.
Early Green Cluster.	9.	May 6	7.	May 10	7.	Jun. 10	July 10	Frotscher.
Early Frame	6.	May 6	8.	May 20	6.	Jun. 10	July 10	Thorburn.
Early Frame	6.	May 6	4.	May 15	.....	.....	.....	Frotscher.
Long Green Turkey..	8.	May 8	9.	May 20	10.	Jun. 10	July 10	Thorburn.
Long Green Turkey..	8.	May 8	8.	May 20	10.	Jun. 10	July 10	Frotscher.
White Spine	9.	May 8	6.	May 25	.....	.....	.....	Thorburn.
White Spine	9.	May 8	7.	June 5	.....	.....	.....	Frotscher.
New Orleans Market	7.	May 10	10.	May 12	5.	Jun. 17	July 15	Frotscher.
Peerless	9.	May 8	4.	May 25	8.	Jun. 6	July 5	Thorburn.
Early Russian	9.	May 6	7.	May 20	6.	Jun. 17	July 10	Thorburn.
Boston Pickling	10.	May 10	5.	May 20	9.	Jun. 10	July 10	Thorburn.
Commercial Pickling	9.	May 10	8.	May 25	4.	Jun. 20	July 15	Thorburn.
White Pearl	9.	May 10	2.	May 15	8.	Jun. 6	July 5	Thorburn.
Monarch White Spine	.....	.....	.....	.....	9.	Jun. 12	July 15	Buckbee.
Fordhook " .....	.....	.....	4.	June 25	.....	.....	.....	Burpee.

At Audubon Park, the Boston Pickling was most prolific. Baton Rouge gives preference to New Orleans Market and Calhoun to Long Green Turkey. An inspection of above table will show that nearly all of above varieties are good.

EGG PLANTS

Are extensively grown by market gardeners in and around New Orleans.

The following are the yields at the three Stations :

VARIETY.	Audubon Park.		Baton Rouge.		Calhoun.			Seedsman.
	Yield 0-10.	First picking.	Yield 0-10.	First picking.	Yield 0-10.	First picking.	Last picking.	
New Orleans Market.....	6	June 15	10	July 3	7	Sept. 15	Nov. 5	Frotscher.
Early Dwarf Oval.....	5	" 10	10	June 1	10	July 15	" 1	"
New York Market.....	3	" 15	2	July 10	6	" 30	" 1	"
Dwarf Purple.....	6	" 10	7	June 10	10	" 15	" 1	Thorburn.
Black Pekin.....	4	" 15	5	Aug. 3	5	Sept. 17	" 5	"
Black Pekin.....	5	" 15	2	July 4	..	.....	.....	Frotscher.
Long White.....	6	" 20	8	" 3	7	" 17	" 5	Thorburn.
Long Purple.....	..	.....	4	" 10	8	Aug. 28	" 1	"
New York Purple.....	..	.....	4	" 3	9	" 28	" 5	"
New York Purple.....	..	.....	8	June 15	..	.....	.....	U.S.Dpt Ag.
Muse's Extra Large.....	..	.....	9	July 3	..	.....	.....	Mrs. Muse.

The seed were sown at Audubon Park March 3d, Baton Rouge February 26th, and Calhoun March —, and transplanted respectively April 1st, March 11th and April 30th.

The crops at Baton Rouge and Calhoun were exceptionally fine, while at Audubon Park, on account of excessive rains, were inferior.

The New Orleans Market and Early Dwarf Oval are perhaps the best varieties for this State. The New York Market seems to be identical with the New Orleans Market.

IRISH POTATOES.

On March 18, new seed of two hundred and forty-eight varieties were obtained from Edward F. Dibble & Co., Honeoye Falls, New York. These were planted at Baton Rouge and Calhoun and the following are the results. The fall crop was a partial failure on account of the prolonged drouth, and the record is of the spring crop only. At Calhoun the comparative results only are given :

IRISH POTATOES.

Number	VARIETY.	Shape.	Color.	Baton Rouge.	Calhoun
				Rate per acre in bushels.	Yield on Scale 0-10.
1	Alexander's Prolific	Round.	White	316.4	5.
2	Alleghany King.....	Oblong.	White.	72.5	6.
3	American Wonder.....	Irregular.	White.	334.2	6.
4	Arizona	Irregular.	Flesh.	310.8	2.
5	American Giant.....	Long.	White.	228.5	5.5
6	American Beauty	Long.	White.	194.2	6.5
7	Albright Seedling	Oblong.	Red.	155.6	7.5
8	Boldridge Seedling.....	Round.	White.	260.8	10.
9	Burpee's Extra Early	Oblong.	Flesh.	363.0	4.5
10	Banner	Round.	White.	302.5	7.
11	Bell Rose	Round.	White.	246.4	5.
12	Buckeye Rusticate	Round.	White.	220.9	4.5
13	Blush Rose.....	Irregular.	Flesh.	106.1	8.5
14	Burpee's Superior.....	Irregular.	White.	158.2	5.
15	Burbank Seedling.....	Irregular.	White.	222.6	5.5
16	Badger State	Long.	White.	198.0	9.
17	Brownell's Best.....	Irregular.	White.	293.8	3.
18	Blight Proof	Round.	White.	129.3	6.5
19	Baraboo White	Long.	White.	60.5	3.5
20	Brownell's Winner	Irregular.	Flesh.	226.7	4.
21	Bill Nye	Long.	White.	159.0	3.
22	Bliss' Triumph	Round.	Red.	180.6	5.5
23	Brooks No. 2	Round.	Blush.	132.0	4.
24	Chicago Market.....	Irregular.	White.	324.0	8.5
25	Cream City.....	Oblong.	White.	254.8	10.
26	Colossal	Large regular.	White.	242.0	8.5
27	Charter Oak	Round.	White.	308.5	2.
28	Carter's Early Sunrise.....	Long.	White.	453.7	5.5
29	Chapman's Early	Round.	White.	250.8	4.
30	Crown Jewel	Large oblong.	White.	262.1	4.
31	Chapin's Seedling.....	Oblong.	Flesh.	161.4	7.
32	Clay Rose	Oblong.	Flesh.	145.7	3.5
33	Collin's Pride.....	Irregular.	White.	231.0	4.5
34	Crane June Eating	Irregular.	White.	275.8	6.5
35	Clark's No. 27	Irregular.	White.	298.4	8.
36	Carman Favorite	Round.	White.	236.3	0.
37	Carman Early	Oblong.	White.	260.1	5.
38	Charles Downing	Large round.	White.	209.4	1.5
39	Cayuga Chief	Long.	White.	165.8	3.5
40	Calico	Irregular.	White.	128.5	0.
41	California Best	Round.	White.	179.5	7.5
42	California Peachblow ...	Long.	Flesh.	123.2	3.
43	County Cork	Round.	Purple.	161.2	6.
44	California Giant	Long.	White.	67.2	1.5
45	Cuba Orange	Small round.	White.	58.3	4.
46	Champion	Round.	White.	161.2	6.
47	Dictator	Round.	White.	226.5	3.5
48	Delaware.....	Round.	White.	321.1	8.5

IRISH POTATOES—CONTINUED.

Number.	VARIETY	Shape	Color	Baton Rouge	Calhoun
				Rate per acre in bushels	Yield on Scale 0—10
49	Durand Seedling	Oblong.	White.	71.7	6.5
50	Dewdrop	Round.	White.	213.7	7.
51	Enos Seedling	Round.	Flesh.	245.4	5.
52	Early Market	Oblong.	Flesh.	171.4	5.
53	Early White Wax.....	Round.	White.	207.0	7.5
54	Early Ohio	Irregular.	Flesh.	328.4	4.
55	Early Mayflower	Round.	White.	213.7	4.5
56	Everett Rose	Irregular.	White.	276.8	7.5
57	Elephant	Irregular.	White.	264.5	8.
58	Early Vermont.....	Irregular.	White.	406.0	7.
59	Early Albino.....	Irregular.	White.	291.2	4.5
60	Early Pride.....	Irregular.	White.	357.5	7.
61	Empire State.....	Irregular.	White.	257.1	5.5
62	Early Oxford.....	Oblong.	White.	165.7	10.
63	Early Walton.....	Large.	Blush.	365.4	8.
64	Early Puritan.....	Round.	White.	170.0	2.
65	Early Fortune.....	Oblong.	White.	217.2	9.5
66	Early Six Weeks.....	Round.	Pink.	184.5	9.
67	Excelsior.....	Round.	White.	151.2	9.50
68	Early California.....	Round.	White.	215.1	5.
69	Early Vaughan.....	Oblong.	White.	197.4	7.5
70	Early Hebron.....	Irregular.	White.	253.0	7.5
71	Early White Prize.....	Round.	White.	289.6	6.
72	Early Mohawk.....	Oblong.	Blush.	144.2	....
73	Early Mohawk Valley.....	Long.	Blush.	231.9	9.5
74	Everett's Heavy Weight....	Irregular.	White.	213.7	6.
75	Early Norther.....	Flattened.	White.	151.2	8.
76	Early Harvest.....	Oblong.	White.	118.9	7.
77	Early Essex.....	Oblong.	Light Red.	243.5	8.
78	Early Pecan.....	Irregular.	White.	175.4	6.5
79	Early Beanburn.....	Irregular.	White.	253.0	5.
80	Early Washington.....	Oblong.	White.	249.5	8.5
81	Early Rose.....	Oblong.	Blush.	269.2	8.5
82	Early Sunlit Star.....	Long.	White.	184.8	5.
83	Flowers' Extra.....	Round.	White.	251.1	5.5
84	Ford's Late White.....	Round.	White.	72.1	1.5
85	Fuller Seedling.....	Long.	White.	169.7	5.5
86	Freeman.....	Oblong.	White.	117.7	4.5
87	G. B. McClelland.....	Round.	White.	191.5	8.
88	Green Mountain.....	Nearly round.	White.	288.0	9.
89	Garfield.....	Oblong.	White.	111.9	7.
90	Gene ee County.....	Large	White.	299.1	5.5
91	Garnet Chili.....	Round.	Flesh.	54.4	4.
92	Gov. Foraker.....	Irregular.	White.	255.4	4.
93	Great Divide.....	Oblong.	White.	214.6	10.
94	Gaelic.....	Irregular.	Flesh.	317.6	8.5
95	German Rose.....	Oblong.	Flesh.	285.2	6.5
96	Gregory No. 1.....	Irregular.	White.	310.0	7.5

IRISH POTATOES—CONTINUED.

Number.	VARIETY.	Shape.	Color.	Baton Rouge.	Calhoun
				Rate per acre in bushels.	Yield on Scale 0—10.
97	Great Eastern.....	Round.	White.	282.3	9.5
98	Good News.....	Irregular.	White.	425.6	7.5
99	Gov. Rusk.....	.....	Failure.	.....	8.
100	Green Mountain.....	.....	Failure.	.....	9.
101	Home Comfort.....	Round.	White.	185.8	5.5
102	Henderson's Best.....	White oblong.	White.	50.2	3.
103	Harvest Queen.....	Round.	White.	167.9	2.
104	Houlton Rose.....	Oblong.	Flesh.	160.5	8.
105	Home Chili.....	Irregular, small	Light red.	26.8	4.
106	Irish Cups.....	Irregular.	White.	248.9	6.5
107	Irish Daisy.....	Round.	White.	178.4	7.
108	Irish Grays.....	Round.	Flesh.	48.4	2.
109	Jumbo Charlie.....	Oblong.	White.	218.5	8.
110	James Vick.....	Long.	White.	147.2	.5
111	Jersey White.....	Round.	White.	242.0	10.
112	Jersey Peachblow.....	Round.	Purple.	363.0	5.
113	Jarrard's Harbinger.....	Oblong.	White.	164.8	5.
114	King of the Roses.....	Long.	White.	408.4	8.
115	King's Excelsior.....	Oblong.	White.	202.8	3.5
116	Late Experiment.....	Round.	Dark blush.	133.1	6.5
117	Lightning Express.....	Round.	White.	181.5	1.
118	Layman's Seedling.....	Irregular.	White.	157.3	5.
119	Lee's Favorite.....	Irregular.	White.	235.2	8.
120	Late Erie.....	Irregular.	White.	104.7	6.5
121	Lake Puritan.....	Round.	White.	211.7	7.5
122	Mill's Prize.....	Oblong.	White.	190.9	8.5
123	Monroe Pride.....	Long.	White.	231.4	6.5
124	Moore's Dakota.....	Oblong.	Pink.	208.6	5.5
125	Manchester Rose.....	Round.	White.	293.9	4.
126	Morgan.....	Round.	White.	250.0	0.
127	Morning Star.....	Long.	Red.	254.8	4.
128	Maggie Murphy.....	Round.	White.	278.0	7.5
129	Matchless.....	Round.	Pink.	190.1	6.5
130	McCormick Seedling.....	Round.	White.	109.4	2.5
131	Maine Pearl.....	Round.	White.	128.6	10.
132	Maine Prize.....	Oblong.	White.	194.0	5.
133	May Seelling.....	Round.	White.	132.5	6.5
134	Montana Rose.....	Irregular.	Flesh.	246.2	7.5
135	Marshal White.....	Round, oblong.	White.	79.4	9.
136	Monroe Beauty.....	Long.	White.	269.9	7.5
137	Monroe Seedling.....	Irregular.	White.	253.1	9.
138	New Queen.....	Oblong.	White.	210.5	7.5
139	Napoleon.....	Long.	White.	229.4	6.5
140	New Seedling.....	Round.	White.	207.8	6.5
141	Narragansett Red.....	Oblong.	Flush.	96.8	7.
142	Niggertoe.....	Round.	Purple.	134.2	5.5
143	Northern Spy.....	Round.	White.	205.4	6.
144	Nonsuch.....	Irregular.	White.	264.0	5.

IRISH POTATOES—CONTINUED.

Number.	VARIETY.	Shape.	Color.	Baton Rouge.	Calhoun
				Rate per acre in bushels.	Yield on Scale 0—10.
145	New Champion.....	Round.	White.	112.3	6.
146	Nameless.....	Oblong.	Flesh.	202.5	9.
147	New York Star.....	Irregular.	White.	242.0	7.5
148	Orphan.....	Oblong.	White.	74.4	5.
149	Ontario Red.....	.....	Failure.	.....	7.5
150	Ohio Red.....	Round.	Flesh.	228.5	6.
151	Ohio Junior.....	Oblong.	Pink.	273.2	4.
152	Overture No. 9.....	Round.	White.	141.1	6.5
153	Polaris.....	Oblong.	White.	67.5	6.
154	Potentate.....	Round.	White.	168.0	4.
155	Prolific Alexander.....	Round.	White.	211.7	5.
156	Pane's Rose.....	Round.	Light red.	95.9	5.
157	Pittsford Prize.....	Oblong.	White.	179.5	6.
158	Peerless Junior.....	Irregular.	White.	121.0	6.5
159	Pride of America.....	Oblong.	White.	117.3	6.
160	Purple Troupe.....	Oblong.	Purple.	35.6	1.5
161	Pride of the East.....	Oblong.	Blush.	161.3	8.5
162	Pride.....	Long.	White.	291.7	3.5
163	Putman's Favorite.....	Nearly round.	White.	305.6	6.
164	Pride of the West.....	Oblong.	Red.	181.5	1.
165	Pat Murphy.....	Round.	White.	268.8	8.
166	Prolific.....	Round.	White.	249.1	6.5
167	Pride of New Jersey.....	Round.	White.	332.7	8.
168	Purple Blush.....	Round.	Light red.	71.1	1.5
169	Pullman Seedling.....	Round.	White.	299.7	7.
170	Paris Rose.....	Oblong.	Blush.	162.3	9.5
171	Peerless.....	Round.	White.	302.5	1.
172	Queen of the Valley.....	Round.	White.	152.8	8.
173	Queen Victoria.....	Long.	White.	243.7	6.5
174	Rural Blush.....	Round.	White.	117.6	7.5
175	Red Star.....	Irregular.	Red.	205.4	3.5
176	Rural New York No. 2.....	Round.	White.	363.0	8.5
177	Rose No. 10.....	Oblong.	White.	245.3	6.
178	Rochester Rose.....	Oblong.	White.	410.7	9.5
179	Randall's Beauty.....	Irregular.	White.	176.0	6.
180	Reese's Rose.....	Irregular.	Rose.	263.3	8.5
181	Rochester Favorite.....	Oblong.	Blush.	163.2	6.
182	Revere Rose.....	Irregular.	Blush.	239.4	5.
183	Rundle Rose.....	Irregular.	Light red.	197.7	7.
184	Raseman's Seedling.....	Round.	Flesh.	101.8	8.
185	Republican.....	Long.	Light red.	372.3	5.
186	Sherman's White.....	Round.	White.	138.7	7.5
187	Signal.....	Oblong.	White.	137.9	5.5
188	Siberian White.....	Irregular.	White.	252.0	7.
189	Summit.....	Oblong.	Blush.	338.8	8.5
190	Storr's Seedling.....	Round.	White.	252.0	6.
191	State of Pecon.....	Irregular.	White.	372.3	6.5
192	Snow Queen.....	Long.	White.	247.3	9.

IRISH POTATOES—CONTINUED.

Number.	VARIETY.	Shape.	Color.	Baton Rouge.	Calhoun
				Rate per acre in bushels.	Yield on Scale 0—10.
193	Strong's Pride.....	Round.	White.	189.6	9.5
194	Snowflake Jr.....	Oblong.	White.	205.7	4.5
195	Sackett's Early.....	Round.	White.	263.3	7.5
196	Spanish Beauty.....	Long.	White.	260.1	8.
197	Snowflake.....	Oblong.	White.	176.0	5.5
198	Seneca Beauty.....	Long.	Blush.	293.2	9.
199	State of Maine.....	Round.	White.	299.7	7.
200	Stray Beauty.....	Oblong.	Light red.	90.2	1.
201	Suffolk Peachblow.....	Irregular.	Blush.	177.4	5.
202	Sarina Red.....	Oblong.	Light red.	194.2	6.5
203	Thorburn's Early.....	Irregular.	White.	320.6	6.
204	Tuscarora Red.....	Round.	Blush.	225.5	6.
205	Telephone.....	Oblong.	White.	324.0	6.
206	Tiral Rose.....	Irregular.	White.	434.6	8.5
207	Thunderbolt.....	Long.	White.	258.9	7.
208	Tuscarora.....	Round.	Red.	205.7	6.
209	The Coming Potato.....	Oval.	White.	161.3	8.
210	Valley Queen.....	Long.	Blush.	298.0	8.5
211	Victor Rose.....	Irregular.	Rose.	157.2	6.50
212	Vick's American Wonder....	Irregular.	White.	248.8	8.5
213	Vick's Late White.....	Round.	White.	102.3	3.5
214	Vick's Armstrong.....	Round.	White.	171.5	3.5
215	Vick's Early White.....	Long.	White.	172.0	6.5
216	Vick's Perfection.....	Irregular.	Red.	315.2	8.5
217	Vick's Abundance.....	Long.	White.	202.7	8.
218	Vick's Broker.....	Long.	White.	108.0	4.5
219	Vick's Long Late White....	Oblong.	White.	267.7	6.5
220	Webster Rose.....	Round.	White.	326.0	7.
221	White Bermuda.....	Round.	White.	160.2	8.5
222	White Mayflower.....	Round.	White.	121.0	4.5
223	Watson's Seedling.....	Irregular.	White.	312.0	9.5
224	Wilson Rose.....	Round.	White.	347.4	7.0
225	White Hebron.....	Irregular.	White.	332.7	7.0
226	White Superior.....	Irregular.	White.	345.7	8.
227	Wall's Maggy Murphy.....	Round.	White.	230.7	8.
228	Wheeler's Seedling.....	Irregular.	White.	271.5	6.5
229	White May Queen.....	Long.	White.	209.7	9.
230	Wood's Early.....	Irregular.	White.	204.3	9.
231	White Imperial.....	Long.	White.	257.6	6.5
232	White Star.....	Oblong.	White.	137.5	1.5
233	White Elephant.....	Oblong.	White.	102.6	1.
234	White Peachblow.....	Round.	Light blush.	48.4	2.50
235	World's Fair.....	Round.	White.	166.1	6.5
236	White Whipple.....	Irregular.	White.	244.8	6.5
237	Yosemite.....	Irregular.	White.	141.1	1.
238	Rhose Island Beauty.....	Round.	Flesh.	41.5	1.
239	Beauty of Hebron.....	Oblong.	Pinkish.	.....	2.
240	No Name.....	Oblong.	White.	.....	7.5

IRISH POTATOES—CONTINUED.

Number.	VARIETY.	Shape.	Color.	Baton Rouge.	Calhoun
				Rate per acre in bushels.	Yield on Scale 0—10.
241	Money Maker.....	Oblong.	White.	.....	7.5
242	Pride of the South.....	Round.	White.	.....	1.25
243	Extra Early Vermont.....	Oblong.	Pink.	.....	1.25
244	Thorburn.	Round.	White.	.....	2.5
245	Early Everett.....	Oblong.	Pink.	.....	6.
246	Early Carmine.....	Oblong.	Pink.	.....	5.
247	Vick's Extra White.....	Oblong.	White.	.....	3.5
248	Puzeltasias.....	Oblong.	White.	.....	8.

REMARKS ON ABOVE.

At Baton Rouge, six varieties gave over 400 bushels per acre, viz: Carter's Early Sunrise (453.7 bushels), Tiral Rose (434.6 bushels), Good News (415.6 bushels), Rochester Rose (410.7 bushels), King of Roses (408.4 bushels) and Early Vermont (406 bushels). Twenty-seven varieties gave over 300 bushels per acre, ninety-seven over 200 bushels per acre, eighty-one over 100 bushels, twenty-two less than 100 bushels and three were failures.

At Calhoun, six varieties gave the largest results, viz: Early Oxford, Cream City, Great Divide, Baldridge's Seedling, Jersey White and Maine Pearl. Eighteen gave nine and over on a scale of 10, thirty-eight eight and over, thirty five seven and over, forty-nine six and over, thirty two five and over and the remainder under five. Two were utter failures, while several others were but little better than utter failures.

The above indicate two facts: First, adaptability of certain varieties to certain soils, and second, that many of the varieties now offered on the market have no real value. In buying seed potatoes a farmer should be sure first of a good variety, and secondly, that it is adapted to his soil.

KALE.

Four varieties of kale were grown at each station during the season, one from Frotscher, the Curled, and three from

Thorburn, the Dwarf Green Curled, the Striped and Tall Green Curled. Each grew well and produced fine plants.

KOHL RABI.

Two varieties of Kohl Rabis were grown, the White Vienna and Purple Vienna, from Frotscher. Each grew well and were popular, although the white variety always sold better than the purple.

LEEK.

The Large London Flag, from Frotscher, was grown at Baton Rouge and did well.

LETTUCE.

Six varieties of Lettuce were grown, two of them being obtained from two sources—Thorburn and Frotscher—in order to note any difference between the growth of these varieties from Northern and Southern seed. A number of sowings were made. The Brown Dutch being one of the best for winter growing and the Royal Cabbage for spring and summer, as it stands the heat well.

The crop was sown at Baton Rouge, February 26 and at Audubon Park, March 4th. The following are the results :

VARIETY	Audubon Park		Baton Rouge		Seedsman	REMARKS
	When Market-able	Yield on Scale of 0-10	When Market-able	Yield on Scale of 0-10		
Brown Dutch	May 1	7	May 6	8	Frotscher	} Fine for winter.
“	“ 1	7	“ 5	8	Thorburn	
White Cos.	“ 5	9½	“ 10	8	Frotscher	
“	“ 5	9	“ 15	8	Thorburn	
Hanson	“ 1	9	“ 10	7	“	} Very similar to White Cos.
Treano Cos.	“ 5	9½	“ 12	8	“	
Brown Head	“ 4	6	“ 15	5	“	
Royal Cabbage	“ 11	10	Frotscher	Best summer variety.

CANTALOUPE.

Twelve varieties were grown at Baton Rouge and nine at Audubon Park. Seed sown at Baton Rouge, March 23d; at Audubon Park, March 5th. There was less blight than usual

and hence all varieties matured fruit. The following are results :

VARIETY	Audubon Park		Baton Rouge		Seedsman	REMARKS
	When Ripe	Yield on Scale of 0-10	When Ripe	Yield on Scale of 0-10		
Hackensack	June 7	4	Jun. 19	7	Frotscher	Earliest at Baton Rouge.
"	" 7	4	" 19	8	Thorburn	
Long Island Beauty	" 5	6	July 6	6.5	Frotscher	Earliest at Audubon Park.
"	" 5	5	Jun. 30	6.5	Thorburn	
Osage	" 10	4	July 11	3	Frotscher	
"	" 10	4	" 3	4	Thorburn	
New Orleans Market	" 10	10	Jun. 28	10	Frotscher	Best at all stations.
Baltimore Market..	" 10	7	July 28	7	Thorburn	
Delmonico	" 10	6	Jun. 29	7	"	
Banquet.....	" 10	5	July 28	6	"	
Jenny Lind	" 7	4	Jun. 29	3	"	
Surprise	" 10	6	July 1	6.5	"	
Cannon Ball.....	.....	.....	" 6	3.5	Burpee	
Melrose .....	.....	.....	" 1	3.2	"	
Tip Top .....	.....	.....	" 11	3	"	

In a general crop no melon is equal to New Orleans Market.

OKRA.

Five varieties were grown at Audubon Park and Calhoun, and three at Baton Rouge, with the following results :

VARIETY.	Audubon Park.		Calhoun.			Seedsman.	Remarks.
	When mature	Scale of 0-10.	When mature	Last Picking.	Scale 0-10.		
White Velvet.....	May 20	8	June 13	Oct. 31	8.25	F	Excellent table variety.
White Velvet.....	" 20	8	" 13	" 31	8.25	T	
Dwarf Density ...	" 15	8.5	" 10	" 30	10	T	One of the best.
Tall Growing.....	" 20	10	" 13	" 31	8.50	F	The common variety.
Tall Growing.....	" 20	10	" 13	" 31	8.25	T	
Dwarf Green.....	" 20	8	" 23	" 25	8.25	T	A good variety.
New Lady Finger..	" 20	10	" 23	" 25	10	B	New & excellent variety.

Any of the above varieties are excellent for table use. The tall growing being perhaps most popular and profitable. All bear well till frost.

PEAS.

VARIETY.	Audubon Park.		Baton Rouge.		Calhoun.			Seedsman.
	When ripe.	Scale of 0-10.	When ripe.	Scale of 0-10.	When ripe.	Last picking.	Scale of 0-10.	
*American Wonder..	April 17	2	April 26	8	April 30	May 8	1.5	Frotscher.
American Wonder....	" 17	2	" 26	8	" 30	" 8	1.5	Thorburn.
Alpha.....	" 26	7	" 29	10	May 10	" 24	3	Frotscher.
Alpha.....	" 26	7	" 26	8	" 10	" 24	2.5	Thorburn.
Blk Eyed Marrowfat	May 8	9	May 17	9	" 25	June 6	8	Frotscher.
Blk Eyed Marrowfat	" 8	9	" 17	10	" 25	" 6	10	Thorburn.
Champion of England	" 8	9	" 17	3	" 28	" 8	4	Frotscher.
Champion of England	" 8	9	" 13	9	" 28	" 6	6	Thorburn.
†Early Tom Thumb..	April 17	2.5	April 26	10	April 30	May 6	2	Frotscher.
Early Tom Thumb..	" 17	2.5	" 26	2	" 30	" 6	2	Thorburn.
Early Alaska.....	" 17	6	" 26	2	" 27	" 2	2	Frotscher.
Early Alaska.....	" 17	6	May 1	3	" 27	" 2	2	Thorburn.
McLean's Advance...	May 4	7	April 29	10	May 18	" 29	2.5	Frotscher.
McLean's Advance...	" 4	7	" 29	10	" 13	" 29	4	Thorburn.
Telephone.....	" 4	8	May 13	9	" 21	June 4	3	Frotscher.
Telephone.....	" 4	8	" 13	7	" 21	" 4	3	Thorburn.
Wht Marrowfat.....	" 8	9	" 17	9	" 25	" 6	8	Frotscher.
Wht Marrowfat.....	" 8	9	" 21	10	" 25	" 6	8	Thorburn.
Blue Beauty.....	April 17	7	" 1	8	" 2	May 10	3	Frotscher.
†Melting Sugar.....	" 22	6	" 17	8	" 17	June 4	8	Thorburn.
Small French.....	" 17	8	" 1	5	" 25	" 5	9	"
Station.....	" 17	6	April 26	3	April 27	May 2	1	"
Renown.....	" 20	4	" 1	6	June 1	June 10	6	Burpee.
Echo.....	" 17	3	" 1	8	" 1	" 10	3.5	"
†Early Market.....	" 17	8	" 26	10	April 27	May 2	2.5	"
Lightning Express...	.....	.....	.....	.....	May 25	June 4	1.5	Buckbee.

*A dwarf variety.

†Edible pods.

‡Very good variety.

Seed planted at Audubon Park March 2d, at Baton Rouge February 17th, and at Calhoun March 4th.

The above are nearly all standard varieties, and a selection to include a variety of dwarf, early and late bush will give yeas throughout the season.

PEPPERS.

Eleven varieties were grown at each station, viz: Celestial, Ruby King, L. R. Cayenne, Large Bell, Golden Dawn, Cardinal, Kaleidoscope, Red Chili, Red Cluster, Procopp's Giant and Tabasco. They all did well. Individual taste may select any of the above, with assurance of adaptation to our soils and climate.

At Audubon Park, Red Cluster and Long Red Cayenne were preferred. Baton Rouge prefers Long Red Cayenne, Sweet

Spanish and Golden Dawn, while Calhoun praises the Ruby King, Long Red Cayenne, Large Bell and Kaleidoscope.

RADISHES.

The following varieties were grown at each station : Bright Breakfast, Chartier, Delicacy, Early White Turnip, Early Roman Carmine, Early Long Scarlet, French Breakfast, Golden Dresden, New White Forcing, New Rapid Forcing, New Crystal Forcing, New Lady Finger, Wood's Early Frame, White Strasbourg, Chinese Rose and White California. These were obtained from Frotscher, Thorburn, Burpee and Buckbee.

Seed were planted at Audubon Park and at Baton Rouge February 26th, and at Calhoun March 5th. For earliness, Wood's Frame, Delicacy, Early White Turnip and French Breakfast are recommended. For large yields, Chinese Rose, Long Chartier, Early Roman Carmine, French Breakfast, Wood's Early Frame and Delicacy. For flavor, Early White Turnip and Delicacy.

RUTA BAGAS

were grown at Baton Rouge and Calhoun. The Improved Purple Top variety was used with excellent results, giving a product of about six tons per acre at Baton Rouge. It would prove a valuable stock feed during the months of December, January and February.

SQUASH.

The following varieties were grown. Seed sown at Audubon Park March 4th, at Baton Rouge April 3d, and Calhoun April 10th.

SQUASH.

VARIETY.	Andubon Park.			Baton Rouge.			Calhoun.			Seedsman.
	When ripe.	Scale of 0—10.		When ripe.	Scale of 0—10.		When ripe.	Last picking.	Scale of 0—10.	
Boston Marrow.....	June 2	6		Aug. 20	8		June 12	June 30	6	Frotscher.
Boston Marrow.....	" 2	6		" 20	7		" 12	" 30	6	Thorburn.
Hubbard	" 10	4		" 15	8		" 20	" 30	4	Frotscher.
Hubbard	" 10	4		" 20	9		" 20	" 30	4	Thorburn.
Early Bush.....	May 10	10		June 15	10		" 1	" 30	7	Frotscher.
Early Bush.....	" 10	10		" 30	10		" 1	" 30	9	Thorburn.
Summer Crookneck..	" 15	10		" 25	7		" 5	July 10	8	Frotscher.
Summer Crookneck..	" 15	10		" 20	7		" 5	" 10	8	Thorburn.
Faxon	June 2	6		July 25	7		" 5	" 10	6	"
Fordhook.....	" 2	7		Aug. 15	5		" 5	" 10	6	"
Golden Custard.....	May 20	9		July 25	6		" 1	" 10	10	"
Manmoth Chili.....	June 10	4		Aug. 20	5		.....	.....	.....	"
Perfect Gem	May 30	8		" 1	6		June 10	July 10	10	"
Turban	June 15	7		" 15	7		" 30	June 30	4	"

The Early Bush or Patty Pan is the favorite variety throughout the South and can scarcely be surpassed. It is followed closely by the Perfect Gem, Golden Custard and Summer Crookneck.

SWEET POTATOES

were grown at Baton Rouge and Calhoun. At Baton Rouge the crop was very good, while at Calhoun the pocket gophers (salamanders) seriously injured the yield. The following table gives the yields. New varieties obtained will be noticed more fully :

SWEET POTATOES.

Number.	VARIETY.	Calhoun.	Baton Rouge.		
		Total yield per acre in bushels	Bushels per acre.		
			Salable.	Culls.	Total.
1	Bermuda		232.87	16.56	249.43
2	Big Stem Jersey		424.35	71.95	496.30
3	Delaware	346	203.65	39.33	242.98
4	Early Golden	400	348.79	12.42	361.21
5	Early Golden Yam (Yardville, N. J.) ..		360.18	10.35	370.53
6	Extra Early Caroline		85.90	11.37	97.27
7	Early Light Red (Yardville, N. J.) ..		161.46	33.12	194.58
8	Early Dark Red (Yardville, N. J.) ..		99.36	16.56	115.92
9	Georgia	Failure.	394.33	20.70	415.03
10	Gold Skin	484	343.62	45.54	389.16
11	Hayman	325	440.91	22.77	463.68
12	Morris' Sweet Seed (New Jersey) ..		86.94	8.28	95.22
13	McCoy's Seed (Norfolk, Va.)		122.13	28.98	151.11
14	Norton	625	219.42	28.93	188.37
15	New Jersey		159.39	28.92	188.37
16	New Jersey Com. Stock (Arnold, N. J.) ..		95.22	6.21	101.43
17	Providence		691.38	10.35	701.73
18	Peabody	372	446.45	12.42	498.87
19	Padisha	210	217.35	16.56	233.91
20	Pumpkin	225	293.94	18.63	312.57
21	Red Brazilian		132.48	12.42	144.90
22	Red Nansemond	340	490.90	14.49	505.39
23	Red Beans (New Jersey)		273.24	20.20	293.94
23	Southern or Yellow Yam	262	153.18	14.49	168.67
25	Southern Red Yam	655	519.57	20.70	540.27
26	Shanghai	404	372.60	24.84	387.44
27	Strasburg	475	223.30	13.50	236.80
28	Southern Queen	395	322.92	18.63	341.55
29	Sugar	250	227.70	18.63	246.33
30	Tennessee	180	322.66	40.30	362.96
31	Ticotea	403	567.18	26.91	594.09
32	Vineless	560	155.25	20.70	175.95
33	Yellow Red		364.32	20.70	385.02
34	Yellow Nansemond	284	217.35	39.33	256.68
35	Yellow Beans (New Jersey)		165.60	20.70	186.30
36	Yellow Jersey (Yardville, New Jersey) ..		387.09	31.05	418.14
37	Yellow Yam (Tennessee)		461.61	24.84	486.45
38	Java No. 1		405.03	6.21	411.29
39	Java No. 2		161.46	10.35	171.81
40	Java No. 3		446.48	20.70	467.18
41	Java No. 4		235.98	14.49	250.47
42	Java No. 5		165.60	8.28	173.88
43	Barbadoes	162			
44	Spanish Yam	305			

Of the new strains obtained this year at Baton Rouge, two varieties, the Red and the Yellow Beans, will be mentioned particularly. These are the results of persistent selection for fifteen years, by Mr. Thomas J. Beans, of Moorestown, New Jersey. He simply called them Red and Yellow and I have added his name. They are much alike, except in color. The object in his selection being to obtain a very short and a very thick root. This was the most popular root and brought the best price in the market. Other varieties were obtained from Norfolk, Va. and Yardville, New Jersey, from Mr. Arnold. The most of these are varieties of the Yellow Nansemond and Queen. The Providence holds out at Baton Rouge as in the seasons past, and has given the largest yield again this year. The Norton has given the largest yield at Calhoun. Farmers interested in raising stock will surely find in the Providence variety one of great merit. The Vineless did not yield well at Baton Rouge, but succeeded at Calhoun. The Old Georgia, Spanish Yam and other yellow yams, are still in demand as eating potatoes.

TOMATOES

were grown at all three station. The following are the results .

TOMATOES.

VARIETY.	Audubon Park.		Baton Rouge.		Calhoun.			Seedsman.	Remarks.
	When ma- ture.	Yield scale 0—10.	When ma- ture.	Yield scale 0—10.	When ma- ture.	Last pick- ing.	Yield scale 0—10.		
Acne	June 1	8	June 11	10	.....	.....	.....	Frotscher.	An excellent variety.
"	" 1	8	" 11	9.5	July 8	July 30	6	Thorburn.	
Beauty	" 9	7	" 18	1	" 1	" 25	9	Frotscher.	A successful variety.
"	" 9	7	" 4	2	" 1	" 30	9	Thorburn.	
Dwarf Champion	" 5	5	" 15	3	" 10	Aug. 1	4	Frotscher.	Not a success.
"	" 5	5	" 24	1	" 10	" 1	4	Thorburn.	
Favorite.	" 10	9	" 15	7	" 6	" 1	6	Frotscher.	Very successful.
"	" 10	9	" 18	8	" 6	" 1	8	Thorburn.	
Mikado	" 20	6	" 30	1	.....	.....	.....	Frotscher.	
"	" 20	6	" 24	2	July 1	July 15	10	Thorburn.	
Perfection	" 10	9	" 24	2	June 30	" 15	4.5	Frotscher.	Rots badly.
"	" 10	9	" 18	2	" 27	" 15	4.5	Thorburn.	An excellent variety.
Trophy	" 1	8	" 11	3	" 27	" 20	8	Frotscher.	Very successful.
"	" 1	8	" 1	1	" 27	" 20	8	Thorburn.	
Autocrat	" 1	6	" 11	3	July 10	" 20	4.5	"	Not a success.
Atlantic Prize	" 1	8	" 11	3	June 27	" 15	8	"	Promising.
Democrat	" 1	7	" 11	2	July 8	" 30	7.5	"	Fairly well.
Long Keeper	" 1	8	" 11	3	" 6	" 30	9	"	Good variety.
Paragon	" 1	9	" 11	3	" 10	" 25	4	Frotscher.	Moderate success.
Peach	" 1	6	" 18	4	" 10	Aug. 10	2	Thorburn.	Inferior yield.
Stone	" 1	8	" 24	2	" 8	July 30	7	"	Good variety.
Terra Cotta	" 15	7	" 24	3	" 8	" 30	6.5	"	Promising.
Atlantic Prize	" 1	8	.....	2	June 30	" 15	8.5	Buckbee.	Promising.
New Tree	" 20	7	.....	4	July 8	" 20	5	"	Inferior.
Dwarf Aristocrat	" 20	6	.....	5	.....	.....	.....	"
Lorillard.	" 20	8	June 11	4	June 27	July 15	6.5	"	Did fairly well.

The seed were planted at Audubon Park, March 4th, at Baton Rouge, February 26th, and at Calhoun, April 5th. The Acme, Favorite and Perfection are universally esteemed and are reliable almost everywhere.

At Baton Rouge, both worms and rot were successfully subdued by spraying with the mixture, Bordeaux and Paris Green.

TURNIPS

were grown at Baton Rouge and Calhoun with the following results:

VARIETY.	Yield on scale 0—10.		Seedsman.	Remarks.
	Baton Rouge.	Calhoun.		
Ey P. Top Munich	8	7	Frotscher.	An old and reliable variety.
Ey P. Top Munich	9	7	Thorburn.	
Ey Wht Fl't Dutch	10	8	Frotscher.	Early and productive. Quality poor.
Ey Wht Fl't Dutch	10	8	Thorburn.	
White Egg.....	7	.....	Frotscher.	One of the best.
White Egg.....	7	10	Thorburn.	
Yellow Finland...	8	5	"	A good variety.
Snow Ball.....	.....	9	"	Similar to White Egg.
Large White Globe.....	.....	10	Frotscher.	Good but late.
Ex. Early Cardinal	9	9	Buckbee.	Very promising.
New Kasmyr.....	9	8	Burpee.	Similar to Extra Early Cardinal.

From the above a selection can be easily be made to suit the varied tastes and wants.

WATERMELONS

were grown at the three Stations. The following varieties were tested:

Florida Favorite. Great success at Audubon Park and fairly good at Baton Rouge and Calhoun. Quality the best.

Ice Cream. Only moderately productive and medium quality.

Kolb Gem. Moderate success. Good shipper.

Mammoth Iron Clad. Moderate success only.

Pride of Georgia. Successful at Baton Rouge. Modeartely well elsewhere.

Seminole. Moderate in yield and quality.

Duke Jones. Very successful everywhere. Quality good.

Lone Star. Fairly successful everywhere. Quality good.

Jumbo. Fairly successful everywhere. Quality good.

Boss. Fairly successful at Baton Rouge. A failure elsewhere.

Cuban Queen. Fairly successful at Baton Rouge. A failure elsewhere.

Melrose Melon and Cannon Ball, from Burpee, were grown at Audubon Park with poor results.

FRUITS.

• APPLES

are grown at Baton Rouge and Calhoun, but only with indifferent results.

The following varieties bore fruit at Baton Rouge the past season, viz.: Romanite, Shockley, Taunton, Maverac Sweet, Red Astrachan, Cullasaga, Transcendant, Hyslop, Baldwin and Carolina Watson. At Calhoun only the Early Harvest and Red Astrachan produced perfect fruit. Many other varieties bore large crops, which rotted before maturity.

It is difficult to find a variety of apple adapted to our soils and climate. Grafts of the Smith, Golden Russet and Bellflower (local varieties) have been successfully grown from scions received from Dr. J. C. Robert, of Centreville, Miss. Also grafts from these local varieties have been inserted from Mr. D. B. Ells, of Gibson, La. By selection from home grown varieties it may be possible ultimately to find a kind of apple suitable to our soils and wants.

Apricots, Almonds and Cherries have proven failures at each Station.

NECTARINES

are worthless at Calhoun, and have been discarded at Baton Rouge. Trials of several varieties are still in progress, with but little promise of ultimate success.

FIGS

grow well at all three Stations. The Celeste is the favorite variety all over the State, and is grown around New Orleans for canning purposes. At Audubon Park the Celeste, White Marseilles, Adriatic and Lemon have borne full crops of excellent fruit. At Baton Rouge the following have been found the best out of a large number of varieties that have borne fruit, viz.: The Mission, Reine Blanche and Honche de Bray. At Calhoun the Celeste, Green Ischia and Brown Turkey have borne fruit.

Fig growing in Louisiana would be a grand success were it not for the fig borer (*Ptychodes vitattus*) which frequently destroys the trees. Its life history is now being studied and some effective remedy it is believed will soon be obtained against its destructive work. Till then the best known protection consists in removing the infected parts of the tree with the borers enclosed and carefully burning them. Quite an industry exists in New Orleans and along the Gulf coast in preserving this fruit, using mainly the Celeste variety.

GRAPES.

A large number of varieties are grown at both Baton Rouge and Calhoun.

At the former place, the following were found the most successful : Dracutt's Amber, Champion, Diamond, Clinton, Herbeumont, Concord, Herbert, Jacques and Ives.

At Calhoun, the following have given best results : Miles, Maxetawney, Pearl, Telegraph, Rogus No. 7, Canada, Black July and Niagara. Further trials may modify considerably these results. In South Louisiana early varieties are freer from fungus diseases and from depredations of birds. It is, however, impossible to grow good grapes without spray pumps and fungicides, and by the free use of the latter, many early varieties may be brought to perfection, while those ripening in July and August, will succumb to disease on account of the daily showers and prevailing muggy weather, preventing complete destruction of the fungi.

PEARS

are difficult to grow in this State on account of the prevalence of the blight. In South Louisiana the Chinese varieties, Le Compte, Kieffer, etc., have practically an immunity from this disease, while at Calhoun even these are fiercely attacked and pear growing at that Station has been a failure. At Baton Rouge and Audubon Park, the Le Conte and Keiffer have borne heavy profitable crops, and a few fair specimens obtained at the former from Smith, Garber and Madame von Seibold.

No trees of the Oriental type have been lost at Audubon Park, while the Mikado, Daimio and Hawaii have been killed with others of the French type, at Baton Rouge.

PEACHES.

A number of varieties of the Peento and Honey have been tested at Audubon Park, upon both the peach and plum stock. Every tree upon the latter (plum) has died, while its duplicate upon peach has flourished. The trouble with these varieties, is the tendency to early blossom, almost invariably ensuing destruction by subsequent frosts. Hence results very unsatisfactory.

In fact, the greatest obstacle to peach growing all over this State is the liability of all varieties of having the fruit killed by frosts, the mildness of the weather in February and March, forcing into full bloom every first bud which may be destroyed by subsequent cold.

On this account, our crop is rarely a full one. Last year the Early Rivers, Elberta, Thurber, General Lee and Chinese Cling gave fine fruit at Baton Rouge.

The Nectarines, Honey and Peento varieties also bore crops which were ruined by the curculio, which seemed to prefer these varieties. All wormy fruit were carefully collected and destroyed in the hope of reducing this pest in the future.

At Calhoun the crop was larger and many varieties bore fruit, but the rains of June and July caused much rotting. The following bore good crops: Cora, Early Rivers, Muscogee, Osceola, Newington, Pallas, Pine Apple, Old Mixon and Oriole.

JAPANESE PERSIMMONS

have been very successful at Audubon Park and Baton Rouge. They are healthy and early bear large crops. Attractive in appearance, large in size and fairly well flavored, they are selling well in the Northern markets. They stand shipping well. They can too be preserved or evaporated. Hence, well worthy of extensive growth throughout South Louisiana. Experiments testing their value in North Louisiana have not yet been productive of decided results. At Audubon Park Tane Nashi, and at Baton Rouge the Hyakume and Hasheya are esteemed the best varieties. Many other varieties have been fruited.

Our "mocking bird" is the worst enemy to this fruit, as it is to all delicacies of the garden and orchard. The hole made in the fruit proved an attractive receptacle to passing insects and they with the germs of decay soon destroy the fruit. Paper sacks, used as a covering, were easily torn by his bill, and only cloth sacks, resist, it is thought, his invasions.

PLUMS.

The Japanese varieties are grown extensively at all three Stations. Several of these are great successes at Audubon Park and Baton Rouge. The Burbank, Abundance and the True Sweet Botan are here pre-eminently successful and are largely grown on the Illinois Central Railroad for Western markets. The Satsuma and Kelsey which bear heavy crops, suffer terribly from premature rotting of fruit, particularly in wet seasons and are liable, on account of early blooming, to have their fruit killed by frost. Many varieties of the domestic type are also grown and give exceptionally large crops. The Wild Goose, Caddo Chief, Marianna, Cumberland, Robinson, Missouri Apricot and Pool's Pride, are to be recommended.

At Audubon Park, three trees of Burbank four years old, bore last season *enormous* crops of fruit, which were not removed or thinned, but permitted to reach perfect maturity. This spring the destructive effect of such a course is visible in the numerous dead branches in all of the trees, portending early death.

QUINCES

are grown at Baton Rouge and Calhoun. At the latter as yet with poor results. At the former, the Champion, Fuller and Augers varieties have borne fruit, are healthy and promising.

ORANGES.

The winter of 1895-5 almost completely annihilated the groves of oranges at Audubon Park and Baton Rouge. At the time of the freeze over 100 varieties of bearing orange trees on all kinds of stocks were growing at the former Station, and a nice young grove of about a dozen varieties was growing at Baton Rouge. Only the hardier Japanese varieties on the Citrus Trifoliata stock withstood the extreme cold. All of the Satsumas and Kumquats, and one each of Tangerine and Jaffa on this stock survived. The lesson of the freeze was a valuable one. It has taught the hardiness of the Trifoliata stock and of the Japanese varieties of oranges. It has declared that neither the Dulcis varieties on Trifoliata nor the Japanese varieties on Sour or Sweet stock could endure such extreme cold, but that a combination of Trifoliata and Satsuma or Kumquat had a resistant power sufficient to withstand even a lower temperature than that experienced (15° F.)

Soon after the freeze arrangements were made to replace the destroyed grove. Seeds of the Trifoliata and Sour oranges were planted and the young trees therefrom have been budded with buds obtained from many sources. In this way young trees of the following varieties are now growing in the grove at Audubon Park :

Cleopatra, Satsuma, China Sweet, Mandarin, Tangerine, Dancy's Tangerine, King, Boone's Early, Beach's No. 1, Parson Brown, Jaffa, Joppa, Ruby Pineapple, Whitaker, St. Michael's, Magnum Bonum, Mediterranean Sweet, Starke's Seedless, Homasassa, Centennial, Riverside Navel, Sanford's Navel, Washington Navel, Parson's Navel, Valencia, Hart's Tardiff, Maltese Blood, Omory's Blood, Du Roi Blood, Old Vine, Maltese Oval, Du Roi, Majorca, Osceola, Orange Lake, Star Calyx, Peerless, Acis, Nonpariel, Spanish St. Michael, H. S. Williams Paper Rind St. Michael, Hegley's Late, De Day's Best. The following

GRAPE FRUITS

have also been planted : Turhley's Excelsior, Marsh's, Walter's Aurantium Pomelo, Marsh's Pomelo, Wright's Seedless, Thompson's Sweet, Triumph Cluster, Joselyn, and two seedlings.

The above varieties will be added to as circumstances will permit.

SMALL FRUIT.

Dewberries have been grown at Baton Rouge and Blackberries at Calhoun.

At the former the Manatee and Austin's Improved (from J. W. Austin, Pilot Point, Texas), produced fine crops last year. The Braden and Coleman (white) are not prolific and will find a place only in the amateur's garden.

The Dallas and Kittitunny were the best varieties of Blackberries, followed closely by the Everbearing Brunton and Snyder. The Wilson was early attacked by rust and has been a failure.

RASPBERRIES

have been tried at both Baton Rouge and Calhoun. At the former place they are not a success. The following varieties produced a few fine berries : Progress, Lovett's, Golden Queen, Cuthbert and Royal Church.

At Calhoun rather better success attended the trials. "Caroline," Marlboro and Shaffer's have done well. The American Black Cap, Cuthbert, Earhart and Ohio are promising better results every year, while the Carman, Gregg, Helborn, Royal Church, Kansas, Palmer's, Muskingum and Turner are failures.

JAPANESE WINEBERRY

has been grown at all the Stations, grows well and produces a moderate quantity of berries of fairly good quality.

STRAWBERRIES

have been grown at all the Stations. On account of large amount of labor to keep them clean during the summer, no especial attempt has been made to study the adaptation of varieties to the alluvial soils of Audubon Park.

At Baton Rouge, special efforts have been made to test all available varieties. The late frosts of last spring partially destroyed the crop, so that not over one third of a crop was produced. Many of the varieties also suffered from the long dry fall, producing few runners, thus abridging the usual number of new plants. Heavy mulching was found of great benefit during this severe weather.

At Calhoun, where the soil and climate are better suited for this berry, a very thorough trial was given to a number of varieties. A fair season prevailed and hence the yields were good. The following table shows the date of maturity, number of pickings, the yield of first and last picking, and total yields per acre. These results were carefully obtained and the table will be of great value to all who contemplate growing strawberries on this character of soil for market or home use:

RESULTS OF STRAWBERRIES AT CALHOUN.

VARIETY.	First ripe fruit.	No. of pickings	Date of first picking.	Yield of first picking.	Date of last picking.	Yield of last picking.	Total yield in quarts.	Remarks.
Beder Wood.....	April 20	10	April 22	345	June 3	300	3622	A good steady bearer.
Crystal City.....	" 20	10	" 24	350	May 30	153.50	3680	A good bearer, but fruit too soft.
West Lawn.....	" 22	10	" 24	345	" 28	172	4140	A good berry, but dies out during summer.
Clingto.....	" 17	10	" 22	345	" 22	172.50	4200	One of the best bearers, but is not hardy.
Michell's Early.....	" 12	18	" 22	518	" 15	690	3967.50	Holds first place for earliness.
Hoffman.....	" 14	5	" 22	690	" 2	430.25	1380	A good early berry, but doesn't last long.
John Little.....	" 19	8	" 24	345	" 16	172.50	2587.50	About the same as Clingto.
Great Pacific.....	" 20	9	" 20	355	" 22	172.50	4140	A good berry, but rusts badly.
Carmichael.....	" 24	7	" 27	172.50	" 28	172.50	2587	A good hardy plant.
Charles Downing.....	" 25	5	May 1	489	" 18	40	2934	Holds out well.
Sharpless.....	" 24	6	" 1	430.50	" 18	172.50	4140	Rusts badly.
Enhance.....	" 17	6	" 1	345	" 18	300	2760	Rusts badly.
Ontario.....	" 24	5	" 1	345	" 16	345	2760	About the same as the preceding.
May King.....	" 24	6	" 1	431.50	" 18	420	3450	A good berry, but like others of this type is very susceptible to rust.
Gandy.....	" 17	6	" 1	450	" 18	375	3560	One of our best.
Crescent.....	" 24	3	" 1	350	" 11	315.50	1300	Has deteriorated.
Haverland.....	" 24	7	" 1	300	" 27	350	3560	One of the best.
Mount Vernon.....	" 24	7	" 1	345	" 22	320	3450	Same as May King.
Excelsior.....	" 27	2	" 1	350	" 6	690	1040	A poor berry, but of fine flavor.
Louisa.....	" 27	2	" 1	648.50	" 6	530	1178.50	Identical with the preceding.
Eureka.....	" 24	1	April 27	242	".....	.....	242	Seems to be a poor berry.
Mrs. Cleveland.....	" 22	4	" 27	350	" 17	172.50	2415	Large fruit, but too soft.
Pineapple.....	" 26	3	May 2	806	" 16	537.50	3226	A strong, healthy grower, but poor fruit.
Stayman No. 1.....	" 26	4	" 2	907.50	" 30	900	3630	A good berry.
Bubach No. 132.....	" 25	4	" 1	302.50	" 25	605	2420	A good strong grower.
Jessie.....	" 25	2	" 5	363	" 15	1815	2178	Has lost its former high position.

RESULTS OF STRAWBERRIES AT CALHOUN.—CONTINUED.

VARIETY.	First ripe fruit.	No. of pickings	Date of first picking.	Yield of first picking.	Date of last picking.	Yield of last picking.	Total yield per acre.	
Warfield.....	April 26	9	April 30	224.50	May 30	449	3912	A good all around berry.
Warfield No. 1.....	" 22	" 25	" 25	403.50	" 28	605	4840	Not as good as the above.
Warfield No. 2.....	" 25	7	May 4	907.50	" 30	605	5445	A fine berry.
Gypsy.....	" 20	4	April 25	270	" 30	102	1613	Ordinary.
Farnsworth.....	" 22	8	" 25	86	" 30	175	2760	A good berry.
Captain Jack.....	" 17	5	" 25	173	" 16	175	2070	A dwarfish grower—too acid.
Logan.....	" 22	4	" 25	403	" 22	100	1615	Ordinary.
Lovett's Early.....	" 22	5	" 25	403	" 25	101	3226	Ordinary.
Yale.....	" 30	5	May 10	907.50	" 30	302.50	4537	A good berry, but unattractive.
Belmont.....	" 26	7	" 4	460	" 30	345	4140	A fine berry.
Ivanhoe.....	" 30	2	" 4	726	" 15	700	1452	A good berry.
Sadie.....	" 22	7	April 25	201	" 22	100.50	4839	A fine bearer, but small.
Shuster's Gem.....	" 22	6	" 30	302.50	" 22	152	3630	Fine flavor, dwarfish grower.
Stevens.....	" 19	2	" 24	172.50	" 2	172.50	345	A poor variety here.
Cloud.....	" 17	7	" 24	345	" 25	172.50	4140	A good berry here, but rusts badly.
Bubach.....	" 25	3	May 4	145	" 16	135	5804	A fine berry, but too soft
Prince of Berries.....	" 29	2	" 6	1037	" 15	513.50	1550.30	A dwarfish grower, fine fruit.
Pioneer.....	" 26	4	" 6	690	" 25	517	2760	A good berry.
Mammoth.....	" 26	4	" 6	690	" 20	517.50	3795	About the same as Pioneer.
Bomba.....	May 6	5	" 8	690	" 30	460	4140	Has done exceptionally well this year.
Jucunda.....	April 30	2	" 8	345	" 20	115	460	Seems to be a poor berry.
Henderson.....	May 1	5	" 8	690	" 30	685	4830	Has done exceptionally well the past season.
Parker Earl.....	April 27	3	" 8	1452	" 20	726	2904	Has done poorly this season.
Monmouth.....	May 1	5	" 11	1450	" 30	232	4032	A good late berry.

NOTE.—Figures in fourth, sixth and seventh columns represent quarts per acre.

The following new varieties have given good growth during the year : Beverly, Bisel, Gandy Belle, Meek's Early, Brandywine, Princeton Chief, Columbia and Paris King.

GOUMI (*Elaagnus longipes*).

This remarkable fruit makes elegant jelly and is destined to become popular some day with all housekeepers for such a purpose. It is a large shrub and bears very early a large crop of fruit about the size of a cherry. It is also an ornamental plant and would adorn a fine lawn.

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Hon. A. V. Carter, Commissioner of Agriculture, Baton Rouge, La.



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